

Post Graduate Specialty Training (PUST) of Family Medicine Doctors in Tajikistan; an Impact and Investment Case

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Introduction

- **Medical Education Reform Project** (SDC, Swiss TPH)
- **Medical Education Reform** for Family Medicine
→ Primary Health Care
- **Two-year Post University Specialty Training (PUST)**
→ Strong practical + theoretical focus
- **One-year internship**
→ Unstructured work experience

Evaluation Methodology

Objective Structured Clinical Examination (OSCE)

→ **Clinical skills, attitudes, behaviour**

- 5 stations
- 4 patient simulators, 10 examiners

Multiple Choice Questionnaire (MCQ)

→ **Theoretical clinical knowledge**

- 60-item MCQ
- 20 tracer diseases
- 3 invigilators

Data Analysis

Calculation of frequencies, Chi square test, Fisher exact test, ANOVA procedure

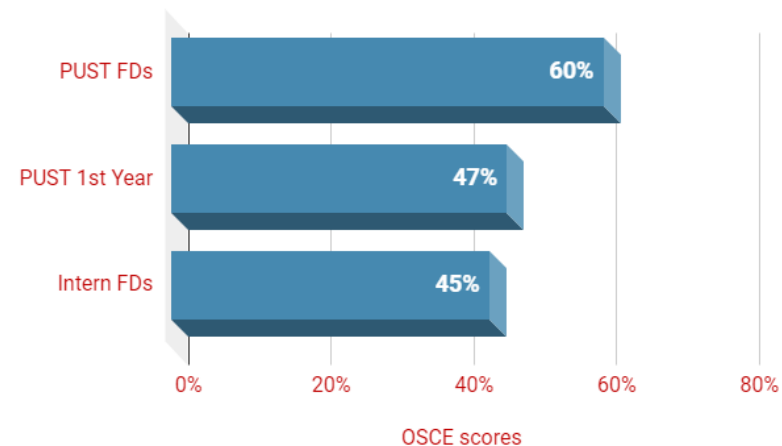
Sample

Group	Description	MCQ Sample	OSCE Sample
PUST 1st Year (N=20)	Graduated medical students newly entering the 2-yr PUST programme	N=20	N=20
Intern FDs (N=22)	Newly graduated FDs who underwent the 1-year internship (unstructured work experience)	N=8	N=6
PUST FDs (N=26)	Newly graduated FDs who just completed the 2-yr PUST programme	N=26	N=24



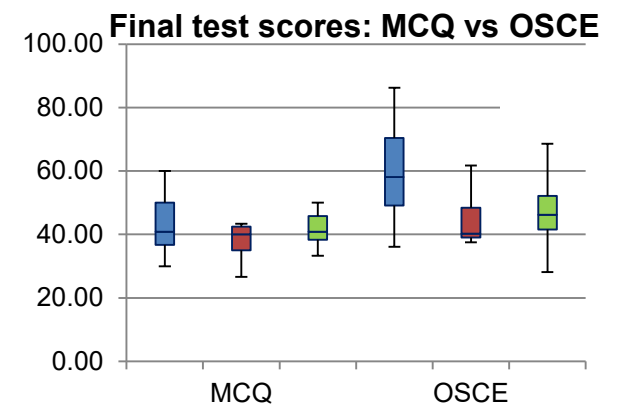
OSCE Results

- **PUST FDs performed best**, followed by the PUST 1st Year, with Intern FDs in fact performing poorest of all
- **Significant differences** between the performance of the PUST FDs and both Interns and PUST 1st Year ($F=8.64$, $P=0.01$)
- → **PUST FDs achieving higher test scores** on average (60%, vs. 45% vs. 47%)
- Statistically significant **gender difference** → female PUST FDs performing better in history taking



MCQ Results

- **PUST FDs answered 44% correctly**, (PUST 1st Year 42%; Intern FDs 38%)
- **PUST FDs had the highest number of “best achievers”** reaching up to 60% of correct answers (PUST 1st Year < 50%; Intern < 45%)
- **Differences between the three samples are minimal**, with PUST FDs and PUST 1st Year being slightly better achievers than Interns



Conclusion & Recommendations

The PUST programme

- **Significant and positive impact**
- Expanding **the programme** nationwide; making it an example for *all speciality trainings* in the country to have a duration of at least 2 years
- **Opportunity to systematically strengthen** the theoretical and practical knowledge, skills and competencies
- **Successful approach** to increase the delivery of high quality **Primary Health Care** services

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Investment Case for the PUST Programme 2019-2023

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**Swiss Agency for Development
and Cooperation SDC**

The PUST Family Doctors are better:

How to transition from international support to sustainable national funding?



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Objectives of the investment case

- 1) Support SDC to lobby for the increase of national funding
- 2) SDC funding is ending 2019
=> support international fundraising
- 3) Advocate for a controlled transition to sustainable national funding
- 4) Provide international donors with an example of “exit option” by gradually decreasing the funding



The investment case in English and Russian

Swiss TPH
Swiss Tropical and Public Health Institute
Schweizerisches Tropen- und Public Health-Institut

Investment Case for Two-Year Post University Specialty Training (PUST) in Family Medicine in Tajikistan
The PUST family doctors are better: How to transition from international support to sustainable national funding?

Investment case for international donors supporting the Ministry of Health and Social Protection of the Republic of Tajikistan
April 2019

According to the Ministry of Health and Social Protection of the Population, 5,333 family doctor positions in Tajikistan were not filled in 2018. The two-year post university specialty training (PUST) in Family Medicine has demonstrated family train significantly better-qualified family doctors than the conventional one-year training experience in family medicine. However, the ending of support from the Swiss Agency for Development and Cooperation (SDC) poses challenges to the sustainability and scale-up of PUST. This investment case assesses the funding needed for a controlled and sustainable transition to national funding in the next five years. It proposes a combination of increasing national funding and gradually decreasing donor support. Moreover, the case predicts the funding needed for scaling up the PUST funding during the same period. It also provides the rationale for the investment.

Methods

The costs of PUST in 2018 are divided into six categories: 1) Stipends of PUST, 2) Stipends of MEP, 3) PUST related salaries of tutors, teachers and coordinators paid by MoHSPP, 4) Additional compensation for tutors, teachers and coordinators paid by MEP, 5) Tutor training covered by MEP, and 6) Other, including transport costs, medical literature and doctor bags for the PUST. Inputs and sources are reported in a technical annex.

A five-year forecast predicts the domestic and donor investments needed for the shift to national funding and for the scaling up of PUST by 2023. The scaling up of PUST to 100 per OFD are also new OFDs to be trained. The costs are presented as undiscounted 2018 Tajikistani somoni (TJS), which were converted to US\$ at the exchange rate 9.4386. The impact of the exchange rate is assessed, taking into account the approaching retirement of family doctors in Tajikistan and the accounts of 60-year-old family doctors and over 60-year-old family doctors. Finally, the results of a recent evaluation of the PUST using an Objective Structured Clinical Examination (OSCE) to compare clinical skills, attitudes and theoretical knowledge of 1) ordinator family doctors (OFDs) graduating from PUST, and 2) interns of the conventional one-year work experience, are summarized.

Recommendations

1. Continue international funding for the PUST. TJS 3.3 million (US\$ 355,000) is needed in 2019-2023.
2. MoHSPP to commit in a minimum national investment of TJS 4.2 million (US\$ 448,000) in 2019-2023.
3. Scale-up the PUST to at least 100 new family doctors per year.
4. Decrease international financing gradually and make it conditional.
5. All new family doctors should graduate from the two-year PUST.

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Figure 1: Annual costs of PUST per category and paper in 2018, Tajikistan

Figure 2: Scale-up forecast of PUST 2019-2023. The number of ordinator family doctors (OFDs) in training.

Figure 3: Annual costs of PUST per category and paper in 2018, Tajikistan

Figure 4: Objective Structured Clinical Examination (OSCE) scores of 1st and 2nd year PUST ordinator family doctors (OFDs) and interns of 1st conventional one-year work experience.

the next five years, 12.4% of family doctors will retire and the population of Tajikistan is projected to grow by 9.5%. When these are factored in, the number of family doctors working increases only marginally, and the percentage of unfilled family doctor positions decline to 42%, despite the PUST scale-up.

The scale-up cost forecast assumes gradual transition to national funding. The decreased stepwise from the 2018 levels to zero in 2023 (Figure 3). Even though the available national funds are limited, increased by 2.2 fold, from TJS 485,000 (US\$ 51,000) in 2018 to TJS 1.1 million (US\$ 111,000) in 2023. The total five-year investments needed for the PUST scale-up are TJS 3.3 million (US\$ 448,000) for the international donor support and TJS 4.2 million (US\$ 448,000) for MoHSPP. As a result of the transition to national funding and the scale increase, the cost of training one OFD is predicted to decline significantly from TJS 63,500 (US\$ 6,730) in 2018 to TJS 10,800 (US\$ 1,110) in 2023.

PUST evaluation

A recent evaluation compared the knowledge of 1st and 2nd-year OFDs and interns at the end of their one-year work experience, by using an objective structured clinical examination (OSCE). The 2nd year OFDs achieved significantly better scores than the interns. The OFDs scored 60% of the possible points, while the interns scored 45% (Figure 4). Alarmingly, the interns scored even lower than the starting 1st year OFDs who scored 47%. This raises questions about the value and usefulness of the conventional one-year work experience.

пср

Институт Последипломного Образования в Сфере Здравоохранения (ИПОСЗ) осуществляет двухгодичную подготовку ПСП по специальности «Семейная медицина» в рамках программы «Медицинское образование и развитие» при Министерстве Здравоохранения и Социальной защиты населения Республики Таджикистан (МЗСН).

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Инвестиционный проект для двухгодичной последипломной специализированной подготовки по семейной медицине в Таджикистане
Семейные врачи прошедшие 2-годичную ПСП лучше: Как перейти от международной поддержки к устойчивому национальному финансированию?

По данным Министерства Здравоохранения и Социальной защиты населения (МЗСН РТ), в 2018 году 5,333 штатных должностей семейных врачей в Таджикистане не были заполнены. Двухгодичная подготовка по специальности «Семейная медицина» продемонстрировала подготовку более квалифицированных семейных врачей, чем обучение одногодичное обучение по семейной медицине. Однако, окончание поддержки со стороны Швейцарского агентства по развитию и сотрудничеству (ШАРС) ставит под угрозу устойчивость масштабного проекта. Этот инвестиционный проект оценивает необходимые финансовые ресурсы, для финансирования и устойчивого масштабирования ПСП. Кроме того, проект прогнозирует необходимые инвестиции для увеличения ПСП в течение этого периода. Также исторически обоснована инвестиция.

В течение пяти лет, 12,4% семейных врачей будут выходить на пенсию, а население Таджикистана прогнозируется увеличиться на 9,5%. Когда эти факторы будут учтены, количество работающих семейных врачей увеличится лишь незначительно, и процент unfilled family doctor positions снизится до 42%, несмотря на масштабирование ПСП.

Прогноз масштабирования ПСП предполагает постепенный переход к национальному финансированию. Постепенное снижение затрат с 2018 года до нуля в 2023 году (рис. 3). Даже при ограниченных национальных средствах, увеличенных в 2,2 раза, с TJS 485 000 (USD 51 000) в 2018 году до TJS 1,1 млн (USD 111 000) в 2023 году. Общие инвестиции на масштабирование ПСП составят TJS 3,3 млн (USD 448 000) для международной поддержки и TJS 4,2 млн (USD 448 000) для MoHSPP. В результате перехода к национальному финансированию и масштабированию, стоимость обучения одного врача прогнозируется значительно снизиться с TJS 63 500 (USD 6 730) в 2018 году до TJS 10 800 (USD 1 110) в 2023 году.

Методы

Недавно проведенная оценка сравнивала знания 1-го и 2-го годов ПСП и интернов в конце их годового опыта работы, используя объективный структурированный клинический экзамен (ОСКЭ). 2-го годов ПСП достигли значительно лучших результатов, чем интерны. ПСП набрали 60% возможных баллов, в то время как интерны набрали 45% (рис. 4). Тревожащим фактом является то, что интерны набрали даже меньше баллов, чем начинающие 1-го годов ПСП, которые набрали 47%. Это вызывает вопросы о ценности и полезности традиционного годового опыта работы.

Рекомендации

1. Продолжить международное финансирование для ПСП. В 2019-2023 годах потребуется 3,3 млн. Сомони (355,000 долларов США).
2. МЗСН принимать обязательство выделить минимум 4,2 млн. Сомони (448,000 долларов США) на национальные инвестиции в 2019-2023 гг.
3. Расширить масштабы деятельности ПСП до минимум 100 новых семейных врачей в год.
4. Постепенно сокращать международное финансирование и делать его условным.
5. Все новые семейные врачи должны закончить 2-годичную программу ПСП по семейной медицине.

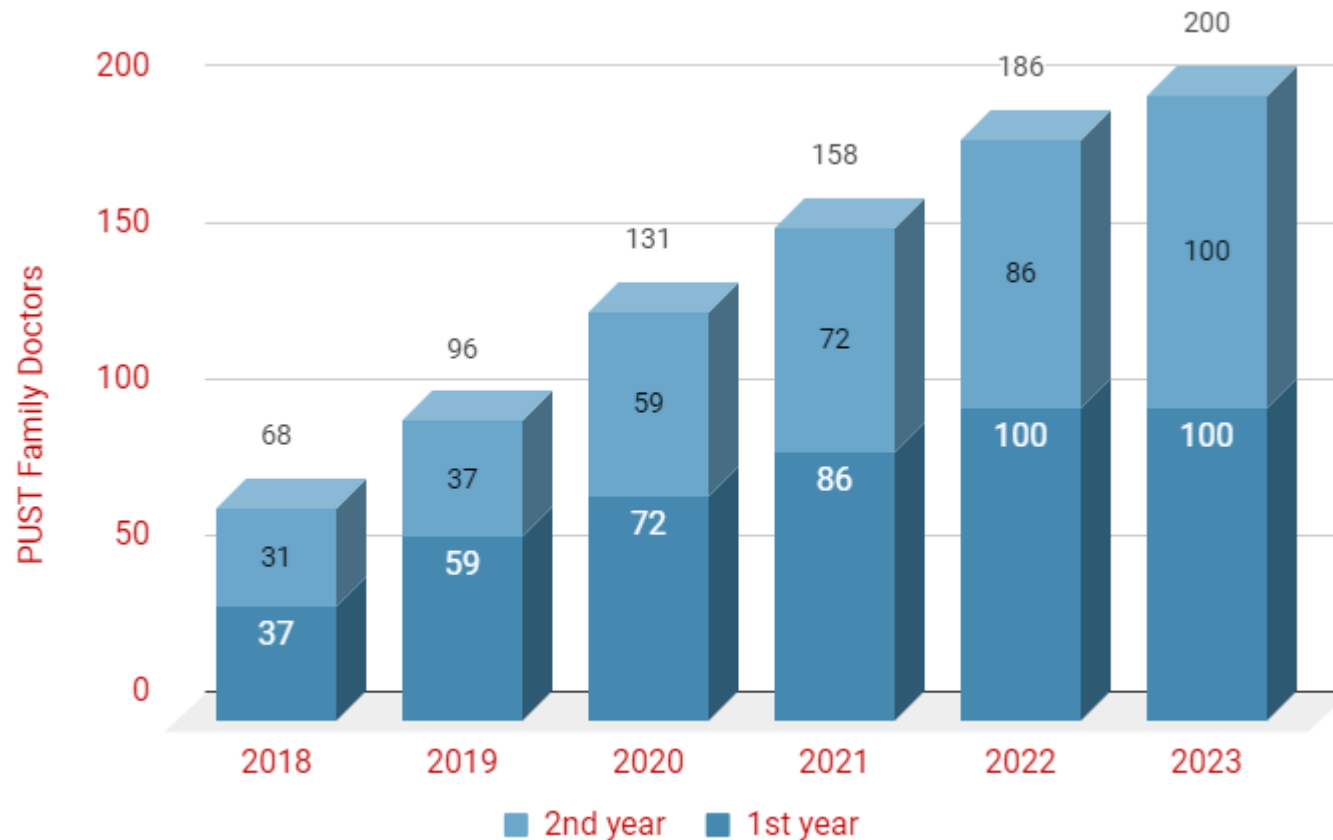
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Эта работа была подготовлена по заказу Швейцарского института Трехстороннего и Общественного Здравоохранения, который финансируется Швейцарским Агентством по Развитию и Сотрудничеству.

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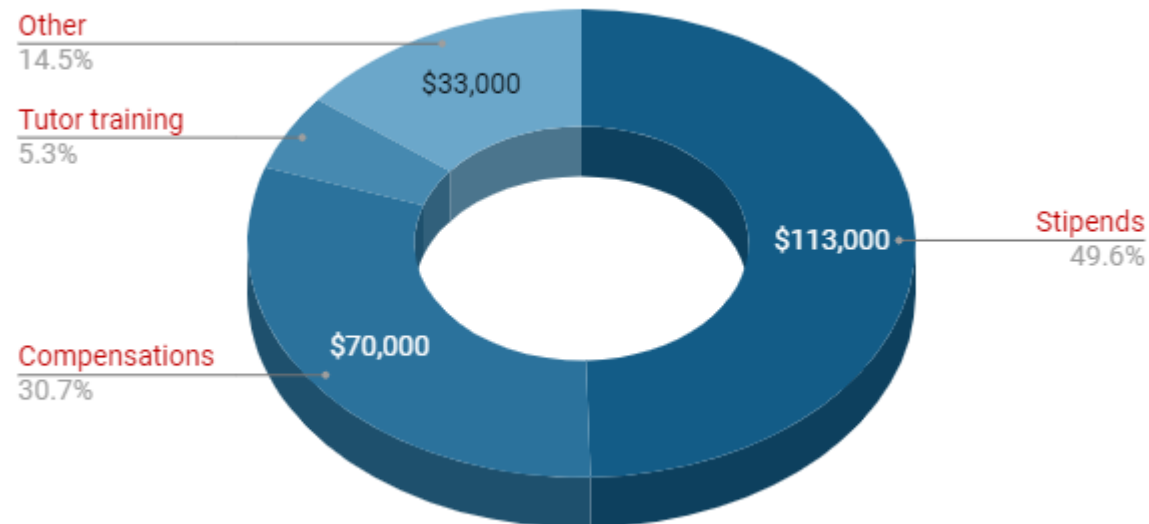
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Scale-up: PUST family doctors



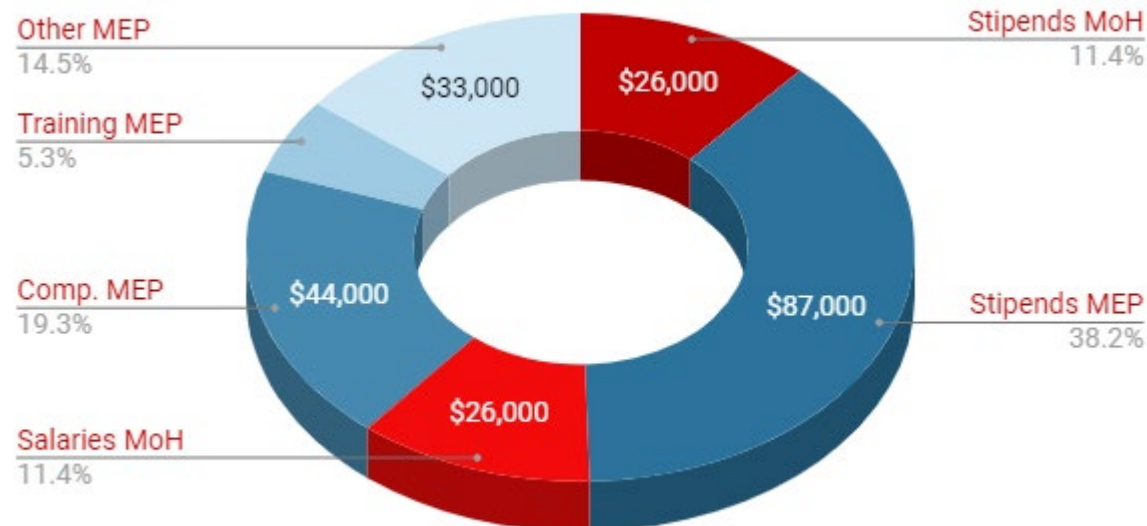
Total costs in 2018

\$228,000 (TJS 2.2 million)

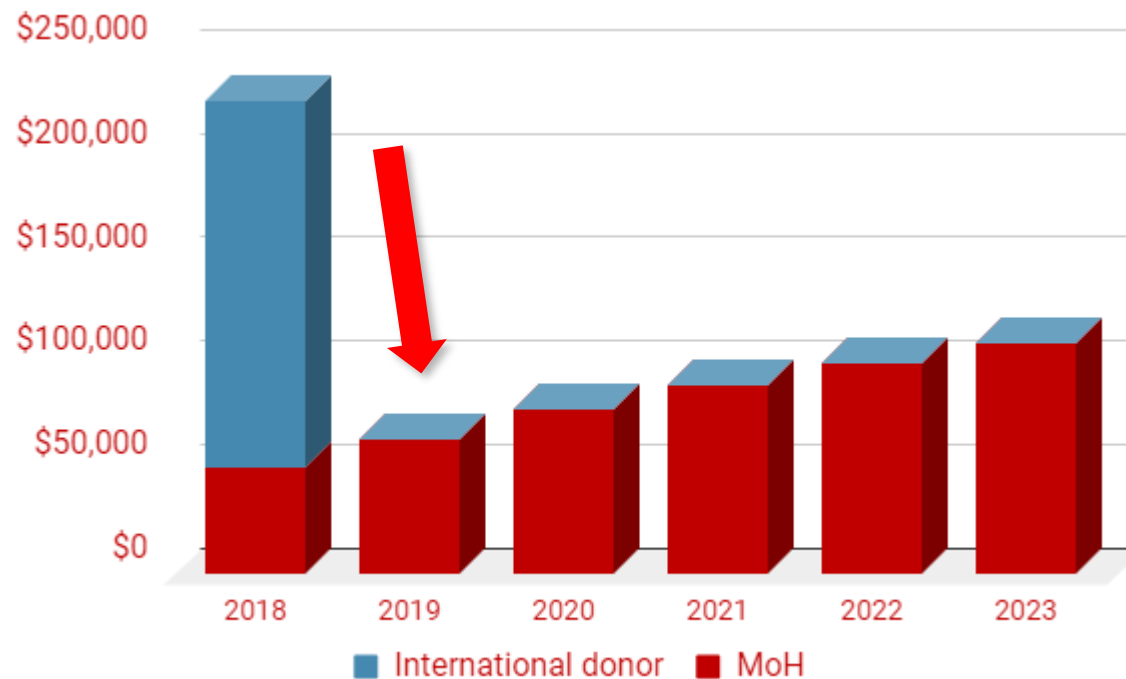


Total costs in 2018

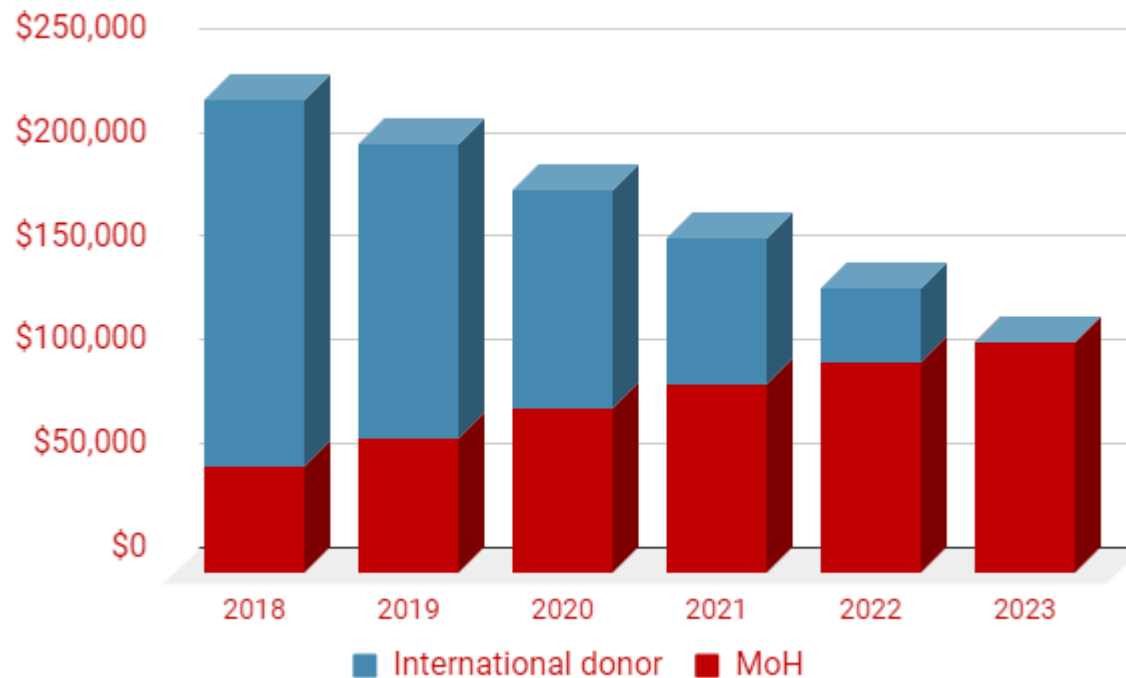
MEP \$176,000 (77%), MoH \$52,000 (23%)



Scale-up: Annual budgets 2018-2023



Scale-up: Annual budgets 2018-2023





Conclusion & Recommendations

- Continue PUST
- Scale-up to at least 100 new family doctors per year
- National funding has to be increased
- All new family doctors should graduate from the two-year PUST, not via the conventional one-year internship

Conclusion & Recommendations

- The ending of SDC funding poses significant challenges to the quality and continuity
- New international funding is urgently needed
- Decrease international financing gradually to prepare for the transition to national funding
- Consider making the funding conditional on the increase of national funding and the number of new family doctors graduating



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Thank you!

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